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BANNER & WITCOFF  
1001 G STREET N W  
SUITE 1100  
WASHINGTON, DC 20001

EXAMINER

ING, MATTHEW W

ART UNIT PAPER NUMBER

3637

DATE MAILED: 08/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/812,359

Applicant(s)

ZENDA ET AL.

Examiner

Matthew W. Ing

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 2,5,8 and 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6,7,9,10 and 12-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3/30/04, 5/5/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. The applicant is first required to elect between the following species:

- Species 1: the embodiment mentioned in page 6, line 22 through page 14, line 11.
- Species 2: the embodiment mentioned in page 14, lines 12-16.

The species are independent or distinct because the differences in structure between a free-motion rotating body that directly contacts the underside of a drawer, and a free-motion rotating body that indirectly contacts both floor and the underside of the drawer by means of an endless track, constitute patentably distinct features.

2. If the applicant elects Species 1, then the applicant is further required to elect between the following subspecies:

- Subspecies 1: Figures 1-6
- Subspecies 2: Figures 7-11

The subspecies are independent or distinct because the presence or absence of a stopper on the rails on either side of the drawer constitutes a patentably distinct feature.

3. If the applicant elects Species 2, then the applicant is further required to elect between the following subspecies:

- Subspecies 3: Figures 1-6
- Subspecies 4: Figures 7-11

The subspecies are independent or distinct because the presence or absence of a stopper on the rails on either side of the drawer constitutes a patentably distinct feature.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. During a telephone conversation with Susan Wolffe (Registration Number 33,568) on 13 June 2006 a provisional election was made without traverse to prosecute the invention of Species 2, Subspecies 4, claims 1, 3-4, 6-7, 9-10, 12-17. Affirmation of this election must be made by applicant in replying to this Office action. Claims 2, 5, 8, and 11 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Priority***

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Information Disclosure Statement***

7. The information disclosure statements (IDS) submitted on 5 May 2005 and 30 March 2004 are in compliance with the provisions of 37 CFR 1.97. Accordingly, these information disclosure statements are being considered by the examiner.

***Drawings***

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the endless track (see claim 3, page 15, line 22) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

9. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37 CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

The drawings fail to include any illustration of the structure, components, and operation of the endless track mentioned in the written description. See page 14, lines 14-16. Additionally, although Item 34 is termed a "right side wall" in the written description, the area designated "34" in Figure 1 shows only a blank space.

10. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the orientation of specific directions mentioned in the specification. Page 8, line 16 refers to a

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“width direction”; and page 12, lines 22-24 includes the phrase “...the free motion rotating body 12 starts to make a rolling movement toward a direction as shown in FIG. 9...”; but there are no vectors corresponding to either of these directions in any of the drawings. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

11. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: “3b”. See page 8, lines 5 and 15; and page 12, line 26.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

12. The disclosure is objected to because of the following informalities: the failure to include commas in locations where such punctuation would be appropriate. Specifically, on page 7, line 2 (between “front and”); on page 7, line 12 (between “11b and”); on page 7, line 12 (between “11c as”); on page 7, line 13 (between “4 so”); on page 7, line 16 (between “5) as”); on page 7, line 18 (between “3 is”); on page 8, line 10 (between “resin with”); on page 8, line 13 (between “3 and”); on page 8, line 21 (between “3 and”); on page 10, line 14 (between “12 relative”); on page 10, line 15 (between “big becomes”); on page 11, line 26 (between “31 although”); on page 12, line 16 (between “down and”); on page 13, line 14 (between “9 and”).

13. The disclosure is objected to because of the following informalities: the failure to include semicolons in locations where such punctuation would be appropriate. Specifically, on page 8, line 14 (between “3 and”); on page 11, line 19 (between “11 and”); on page 12, line 3 (between “3 however”).

14. The meaning of the phrase “as being”, found on page 6, lines 25-26; page 7, line 16; page 8, line 7 is unclear; moreover, the inclusion of the phrase within other phrases renders them incomprehensible. The examiner requests that the applicant clarify the meaning of this phrase.

15. The meaning of the phrase “an upper portion of a side that is orthogonal to a direction of drawing” on page 7, lines 22-24, is unclear. There is no indication in the surrounding text of which drawing the phrase is referring to. The examiner requests that the applicant clarify the meaning of this phrase.

16. The word “with”, on page 7, line 14, is used in a grammatically-incorrect manner. The examiner suggests substituting the word “by” for “with” in this instance.

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17. The meaning of the phrase “at least right-and-left two places of the bottom wall” on page 8, lines 1, is unclear. The examiner requests that the applicant clarify the meaning of this phrase.

18. The phrase “a pair of the rotors 14 are arranged inner side of each rail”, on page 8, lines 20-21, is grammatically incorrect. The examiner suggests emplacing the phrase “at the” or “on the” between the words “arranged” and “inner”.

19. The phrase “and also possible to decrease the frictional force...” on page 11, lines 19-20, is grammatically incorrect. The examiner suggests including the phrase “it is” between the words “and” and “also”.

20. The meaning of the phrase “it is possible to open both sides of the free motion rotating body 12 in order to support rear end sides of the right and left side edges of the drawer 3 by the suspension rail mechanism” on page 11, lines 16-19, is unclear. The examiner requests that the applicant clarify the meaning of this phrase.

21. The meaning of the word “effective” on page 12, line 14, and page 14, line 4, is unclear. The examiner requests that the applicant clarify the meaning of this word.

22. The meaning of the phrase “get into under” on page 13, line 15, is unclear. The examiner requests that the applicant clarify the meaning of this phrase.

23. The written description recites the phrase “At this time, an inclined face 3a1 gradually approaching the floor F is arranged on the downward facing surface...” on page 13, lines 12-13. The plain meaning of the word “arranged”, when used in combination with the phrase “at this time”, implies that the inclined face 3a1 may be removable; however, such removability is neither illustrated in the drawings, nor mentioned elsewhere in the specification. The examiner requests that the applicant clarify whether or not the inclined face 3a1 is in fact removable.



Appropriate correction is required.

***Claim Objections***

24. Claim 1 is objected to because of the following informalities:
25. The phrase “in a manner movable along back and forth”, on page 15, lines 3-4 and 5, is grammatically incorrect. The examiner suggests substituting “in a horizontally-movable manner” for the aforementioned phrase.
26. The word “by”, on page 15, line 8, is used in a nonsensical manner. The examiner suggests substituting the word “in” for “by” in this instance.
27. The word “with”, on page 15, line 13, is used in a nonsensical manner. The examiner suggests substituting the word “by” for “with” in this instance.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

28. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

29. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The examiner points out that, as commonly understood in the art, a structure incorporating an endless track typically comprises, at a minimum, at least two rotating bodies, about which the endless track rides, as well as the track itself. The existence of a second free motion rotating

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body is an essential component of any structure incorporating an endless track; however, the specification gives no indication that the alleged invention includes such a component.

Furthermore, the specification fails to describe how an endless track would interact with the stopper and the inclined face at the bottom of the drawer; or how the endless track would be kept in tension while the drawer is in motion. The examiner points out that, in the written description, the only mention of an endless track is on page 14, lines 14-16; however, this phrase gives no indication of how an endless track would function in relation to the rest of the invention (stoppers, rotors & rails, etc.). Moreover, as is pointed out above, none of the drawings, either in this application or the foreign application from which priority is claimed, contain illustrations of the alleged invention incorporating an endless track.

30. Claim 3 is rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A second free motion rotating body; a second pair of rotors on either end of the second free motion rotating body; and a means whereby the endless track will be kept in tension while the first and second free motion rotating bodies move horizontally along the rails; all critical or essential to the practice of the invention, but not included in the claim, are not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The examiner points out that, as commonly understood in the art, a structure incorporating an endless track typically comprises, at a minimum, at least two rotating bodies, about which the endless track rides, as well as the track itself. Additionally, an endless track utilized as a means of locomotion is usually kept substantially in tension; the complete absence of such tension renders the track a hindrance, rather than an aid, to horizontal motion. Whatever means are intended for keeping the endless track in tension, the maintenance of such tension inherently requires that the

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second free motion rotating body move in near synchronization with the first free motion rotating body; such that, if the first free-motion rotating body is mounted via rotors upon rails, so also must the second free motion rotating body. Hence the implied need for a second pair of rotors. The existence of a second free motion rotating body; a second pair of rotors on either end of the second free motion rotating body; and a means whereby the endless track will be kept in tension while the first and second free motion rotating bodies move horizontally along the rails; are all essential to the proper functioning of an endless track in this context; however, neither the claims nor the specification give any indication that the alleged invention comprises such components. Furthermore, the specification and claims fail to clearly describe how an endless track would interact with the stopper and the inclined face at the bottom of the drawer.

31. Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Specifically, the claim includes the limitation, "...or the drawer is a simplical body arranged all over the drawer storage portion" (page 18, lines 10-11). However, the meaning of the term "simplical" is unclear. The specification does not clearly define the term, nor is there a dictionary definition available for the term, nor is the term commonly used in the art; moreover, the context of this term in both the claims and the specification fails to give any indication what its definition might be. This being the case, the specification is non-enabling with regards to this claim, since the phrase "a simplical body" is not described in the specification in such a way as to enable one skilled in the

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art to which it pertains, or with which it is most nearly connected, to make and/or use the that aspect of the claimed invention.

32. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

33. Claims 1, 3-4, 6-7, 9-10, 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

34. Claim 1 fails to recite sufficient structural elements and interconnection of the elements to positively position and define the means whereby the rear end side of the object is supported in the box body, so that an integral structure able to function as claimed is recited.

35. Claim 1 fails to recite sufficient structural elements and interconnection of the elements to positively position and define the means whereby the free motion rotating body makes a rolling movement at half traveling speed of the object, so that an integral structure able to function as claimed is recited.

36. Regarding claim 1, the meaning of the phrase “a front end side thereof is supported in a manner movable along back and forth by a floor at least through a rolling supporting body so as to draw the object forward from a stored position in the box body”, on page 15, lines 3-8, is unclear. The examiner requests clarification regarding the precise meaning of this phrase. For the purposes of examination, the examiner is considering the phrase to mean that a) the object is capable of moving horizontally along a floor; b) the object is capable of being drawn forward from a stored position in the box body; and c) the front end side of the object is supported by a single rolling horizontal body.

37. Regarding claim 1, this claim recites the limitation “in a manner movable along back and forth by a floor”. The positive language of this limitation renders the claim indefinite, since it is unclear whether the term “floor” actually denotes a component of the claimed invention, or is merely included for illustrative purposes. For the purposes of examination, the examiner is considering that the term “floor” is not part of the claimed invention; but rather that it is merely included for illustrative purposes.

38. Regarding claim 1, the word “thereof” on page 15, line 4 renders the claim indefinite, since it unclear whether “thereof” refers to the object or the box body. For the purposes of examination, the examiner is considering the word “thereof” to denote the object, and not the box body.

39. Regarding claim 1, the term “adopts” (page 15, line 9) is apparently used by the claim to mean “include”, while the accepted meaning is “take into one's family”; “to take up”; or “to choose”. The term is indefinite because the specification does not clearly redefine the term. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

40. Regarding claim 1, the word “whose” on page 15, line 11 renders the claim indefinite, since it unclear whether “whose” refers to rolling supporting body, the free motion rotating body, or the downward facing surface of the object. For the purposes of examination, the examiner is considering the word “whose” to denote the free motion rotating body.

41. Regarding claim 1, the word “speed” on page 15, line 14 renders the claim indefinite, since it unclear whether “speed” refers to the rotational or linear velocity. For the purposes of examination, the examiner is considering the word “speed” to denote linear velocity.

42. Claim 3 fails to recite sufficient structural elements and interconnection of the elements to positively position and define the following: a second free motion rotating body, about which the endless track rides; a second pair of rotors on either end of the second free motion rotating body; and a means whereby the endless track will be kept in tension while the first and second free motion rotating bodies move horizontally along the rails; such that that an integral structure able to function as claimed is recited. The examiner points out that, as commonly understood in the art, a structure incorporating an endless track typically comprises, at a minimum, at least two rotating bodies, about which the endless track rides, as well as the track itself. Additionally, an endless track as utilized as a means of locomotion is usually kept in tension; the absence of such tension renders the track a hindrance, rather than an aid, to horizontal motion. Whatever means are intended for keeping the endless track in tension, the maintenance of such tension inherently requires that the second free motion rotating body move in near synchronization with the first free motion rotating body; such that, if the first free-motion rotating body is mounted via rotors upon rails, so also must the second free motion rotating body. Hence the implied need for a second pair of rotors. The existence of a second free motion rotating body; a second pair of rotors on either end of the second free motion rotating body; and a means whereby the endless track will be kept in tension while the first and second free motion rotating bodies move horizontally along the rails; are all essential to the proper functioning of an endless track; however, neither the claims nor the specification give any indication that the alleged invention

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comprises such components. Furthermore, the specification and claims fail to clearly describe how an endless track would interact with the stopper and the inclined face at the bottom of the drawer.

43. Claims 4 and 6 fail to recite sufficient structural elements and interconnection of the elements to positively position and define the means whereby the free motion rotating body is supported by the object, so that an integral structure able to function as claimed is recited.

Claims 4 and 6 also fail to indicate how the object, having its front end side supported by the free motion rotating body (as stated in claim 1 – see page 15, lines 12-13), can simultaneously provide support to the free motion rotating body, as suggested by claims 4 and 6.

44. Regarding claims 4 and 6, the word “rail” on page 15, line 26, and page 16, line 6, renders these claims indefinite, since it unclear whether “rail” refers to Item 11 or Item 13 in the written description of the application. The examiner points out that, in the written description, the word “rail” is used to denote both components. For the purposes of examination, the examiner is considering the word “rail” to denote Item 13 in both claims.

45. Regarding claims 7 and 9, the phrase “gets into under”, on page 16, line 12, and page 17, line 4, is nonsensical, and its meaning therefore unclear. The examiner requests clarification regarding the precise meaning of this phrase. For the purposes of examination, the examiner is considering the phrase “gets into under” to mean, “moves underneath”.

46. Regarding claim 14, limitation “wherein the object is a drawer and the box body is a drawer storage portion of a desk with a drawer or store fixtures such as a wagon or the like equipped with a drawer” renders the claim indefinite, since it is unclear whether the second and third instances of the word “drawer” denote separate drawers, or are all referring to a single

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drawer. The examiner requests clarification regarding the precise meaning of this limitation.

For the purposes of examination, the examiner is considering the first two instances of the word “drawer” (on page 18, lines 4 and 5) to refer to a single drawer; and the third instance of the word “drawer” (on page 18, line 6) to refer to a separate drawer located within a store fixture.

47. Regarding claim 14, limitation “wherein the object is a drawer and the box body is a drawer storage portion of a desk with a drawer or store fixtures such as a wagon or the like equipped with a drawer” (page 18, lines 3-6) renders the claim indefinite, since it is unclear whether the limitation is implying a) that the box body can be either a drawer storage portion of a desk, or a store fixture comprising a drawer; or b) that the box body is a drawer storage portion of a desk, and said drawer storage portion can accommodate either a drawer, or a store fixture comprising a drawer. The examiner requests clarification regarding the precise meaning of this limitation. For the purposes of examination, the examiner is considering this limitation to mean that the box body can be either a drawer storage portion of a desk, or a store fixture comprising a drawer.

48. The inclusion of the term “simplical” in claim 15 (page 18, line 10) renders the scope of the claim indefinite because the specification does not clearly define the term, nor is there a dictionary definition available for the term. Additionally, the context of this term in both the claims and the specification fails to give any indication what its definition might be. The examiner requests clarification regarding the precise meaning of this term. The applicant is reminded that no new matter may be introduced into the specification or the claims. For the purposes of examination, the examiner is considering the phrase “simplical body” to mean “a body whose pieces are arranged as a single whole”.



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49. Regarding claims 16 and 17, the meaning of the limitation “wherein the drawer has an arrangement in which each upper part of three sides of a bottom wall is surrounded by a standing wall and an upper part of one side thereof that is orthogonal to a direction accessible to an article to be stored is open” is unclear. The examiner requests clarification regarding the precise meaning of this limitation. For the purposes of examination, the examiner is considering this limitation to mean that the drawer has a bottom wall and three additional walls at various sides of the drawer.

50. Regarding claims 16 and 17, the word “thereof” on page 18, line 16, renders these claims indefinite, since it is unclear whether “thereof” refers to the bottom wall or one of the three standing walls; and if the latter, which one. The examiner requests clarification. For the purposes of examination, the examiner is considering the word “thereof” to denote the bottom wall in both claims.

51. Regarding claim 14, the phrase “or the like” renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by “or the like”), thereby rendering the scope of the claim(s) unascertainable. Also, the phrase “such as” renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

52. Claims 10 and 12 are considered indefinite since they depend from an indefinite base claim.

### ***Claim Rejections - 35 USC § 101***

53. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 3 is rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. Although the use of an endless track as a means of support is briefly disclosed on page 14, lines 14-16 of the specification, there is no further disclosure given in the specification regarding several details crucial to the proper operation of an endless track as part of the invention. The examiner points out that, as commonly understood in the art, a structure incorporating an endless track typically comprises, at a minimum, at least two rotating bodies, about which the endless track rides, as well as the track itself. The existence of a second free motion rotating body is an essential component of any structure incorporating an endless track; however, the inclusion of such a component in the claimed invention is not disclosed. Furthermore, the specification fails to disclose how the endless track would interact with the stopper and the inclined face at the bottom of the drawer; or how the endless track would be kept in tension while the drawer is in motion. Does the second free motion rotating body also contact the inclined face? Does said second free motion rotating body ride on rotors, and is it also held in place by a stopper when the drawer is in an unopened position? Whereas the existence of such crucial structure and connections is not disclosed in the specification, and their existence cannot be reasonably inferred from the disclosure as currently stated, the disclosed invention therefore cannot be considered operative.

***Claim Rejections - 35 USC § 102***

54. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

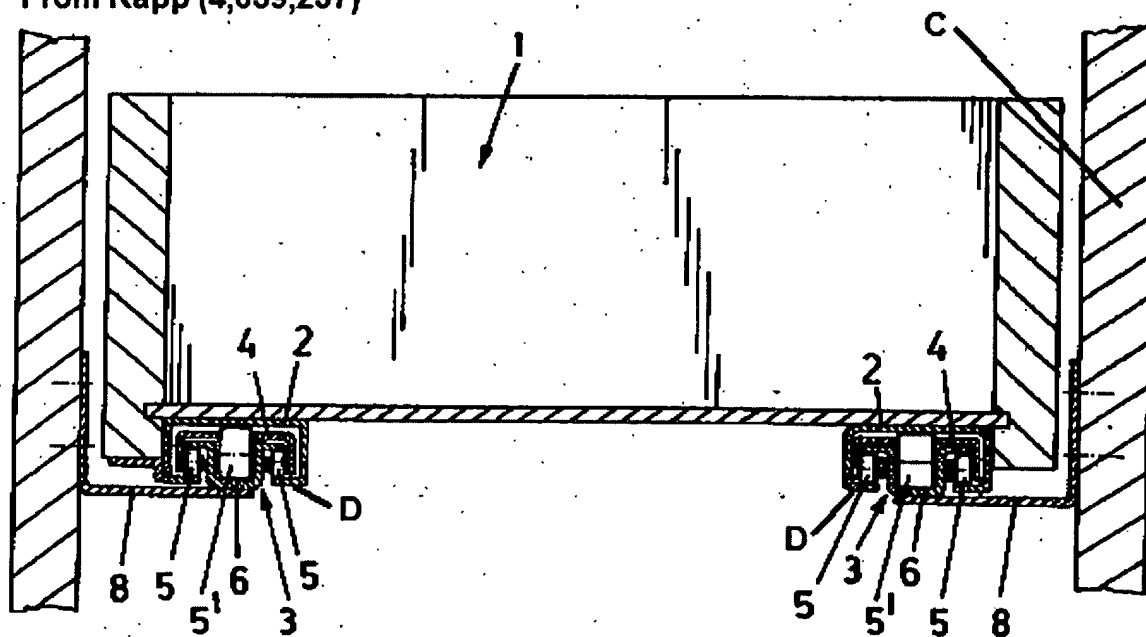
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

55. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

56. Claims 1, 3, 4, and 6, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Rapp (4,659,237).

**Figure 1, Annotated  
From Rapp (4,659,237)**



57. Regarding claim 1, Rapp teaches a structure wherein at least a rear end side of an object (1) is supported in a box body (Item C in Figure 1 Annotated) in a manner movable along back and forth and a front end side thereof is supported in a manner movable along back and forth by a floor (6) at least through a rolling supporting body (5') so as to draw the object forward from a stored position in the box body (C), and characterized by that the rolling supporting body adopts

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a free motion rotating body (5') whose upper end makes an abutting contact with a downward facing surface (2) of the object (1) and whose bottom end contacts the floor (6), and the free motion rotating body (5') supports the front end side of the object with making a rolling movement at a half traveling speed of the object. The examiner points out that, due to basic physics, the free motion rotating body (5') will inherently move at a half traveling speed of the object (1) when said object is moved horizontally.

58. Regarding claim 3, Rapp teaches a structure wherein the free motion rotating body (5') contacts the downward facing surface (2) of the object (1) and the floor (6) through an endless track (i.e., the outer surface of Item 5').

59. Regarding claim 4, Rapp teaches a structure wherein the free motion rotating body (5') is supported by the object (1) in a manner capable of being suspended through a rail (Item D in Figure 1 Annotated) and a rotor (5).

60. Regarding claim 6, Rapp teaches a structure wherein the free motion rotating body (5') is supported by the object (1) in a manner capable of being suspended through a rail (Item D in Figure 1 Annotated) and a rotor (5).

61. Claims 14 and 15, as best understood, are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Rapp (4,659,237). Rapp teaches the structure substantially as claimed, including a drawer (1) arranged at the lowest part of the box body (Item C in Figure 1 Annotated), said box body being a drawer storage portion.

Additionally, whereas the utilization of structures such as that taught by Rapp in desks with drawers is well-known in the art – see, for example, Grieser (5,785,400), Gutner (4,305,625), Brodbeck (2,327,761), and Harmon (2,950,158) – it would have been obvious to replace Item C

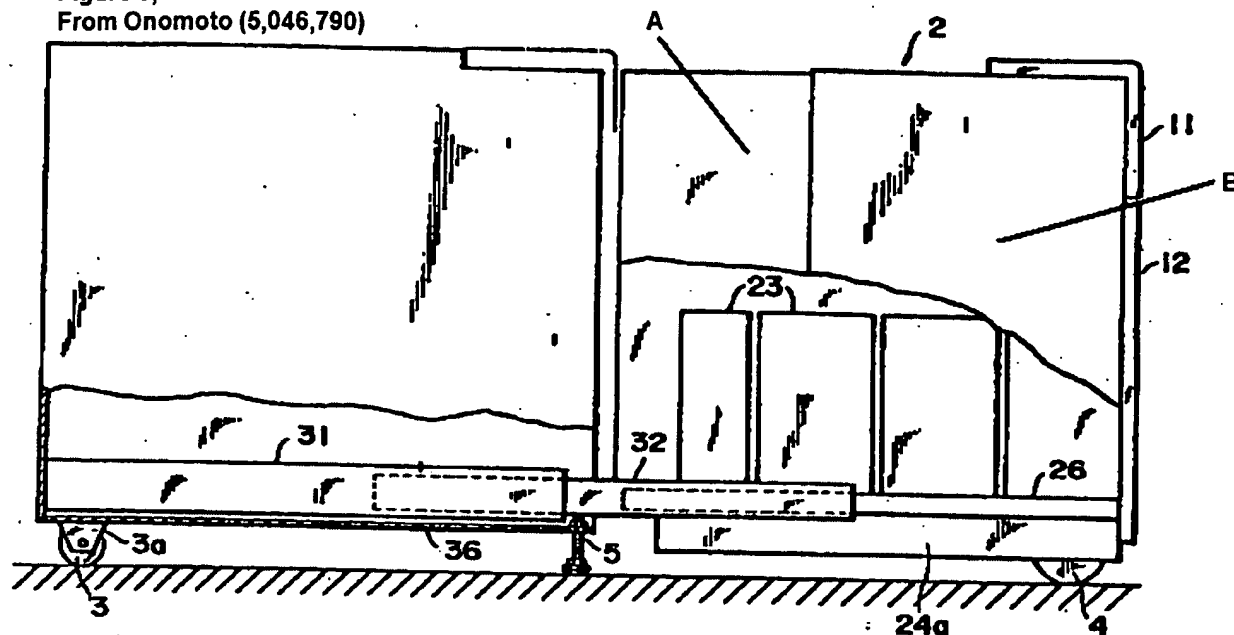
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of Figure 1 Annotated with a drawer storage portion of a desk in order to provide structural support to a desk drawer while preserving the horizontal mobility thereof, thereby providing the structure substantially as claimed.

***Claim Rejections - 35 USC § 103***

62. Claims 1, 3, 4, 6, 14, and 15, as best understood, can be alternately rejected, along with claims 16 and 17, as best understood, under 35 U.S.C. 103(a) as being unpatentable over Onomoto (5,046,790) in view of Reaney (5,779,067). Onomoto teaches the structure substantially as claimed, including a structure wherein at least a rear end side (Item A in Figure 3 Annotated) of an object (2) is supported in a box body (1) in a manner movable along back and forth and a front end side thereof is supported in a manner (Items 26 and 31-34) movable along back and forth by a floor at least through a rolling supporting body (4) so as to draw the object (2) forward from a stored position (see Figure 2) in the box body (1), and characterized in that the rolling supporting body includes a free motion rotating body (4) whose bottom end contacts the floor (see Figures 2-5), said free motion rotating body supporting the front end side (Item B in Figure 3 Annotated) of the object (2); said free motion rotating body being supported by the object in a manner capable of being suspended through a rail (31) and a rotor (33); wherein the object (2) is a drawer (see Figure 3) and the box body (1) is a drawer storage portion of a wagon equipped with a drawer (see Figures 1-3); and wherein the drawer (2) is arranged at the lowest part of the drawer storage portion (1).

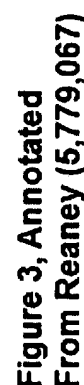
Figure 3, Annotated  
From Onomoto (5,046,790)



63. The only difference between Onomoto and the invention as claimed is that Onomoto fails to teach a structure comprising a free-motion rotating body whose upper end that makes an abutting contact with a downward facing surface of the object, and that makes a rolling movement at a half traveling speed of the object; said free motion rotating body contacting the downward facing surface of the object and the floor through an endless track; and wherein the drawer has an arrangement in which each upper part of three sides of a bottom wall is surrounded by a standing wall and an upper part of one side thereof that is orthogonal to a direction accessible to an article to be stored is open.

64. Reaney, however, teaches a structure comprising a free-motion rotating body (C) whose upper end that makes an abutting contact (see Figure 3) with a downward facing surface of a drawer (B) and whose bottom end contacts the floor (see Figure 3), and that makes a rolling movement at a half traveling speed of the object; said free motion rotating body contacting the downward facing surface of the object and the floor through an endless track (i.e., the outer

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speed of the object, it is reasonable to conclude that in any structure comprising a free-motion rotating body whose upper end makes abutting contact with a downward-facing surface of a drawer, and whose bottom end contacts the floor, the free-motion rotating body will make a rolling movement at a half traveling speed of the object. As such, since the structure of Onomoto as modified by Reaney comprises a free-motion rotating body (Item C of Reaney) whose upper end that makes an abutting contact (see Figure 3) with a downward facing surface of a drawer (Item B of Reaney) and whose bottom end contacts the floor (see Figure 3), it can be concluded that the free-motion rotating body (C) makes a rolling movement at a half traveling speed of the object; and that the structure of Onomoto as modified by Reaney therefore reads upon the limitations of claim 1.

67. Claims 7 and 9, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Onomoto (5,046,790) in view of Reaney (5,779,067) and Alreck (6,371,584). Onomoto and Reaney teach the structure substantially as claimed, including a free-motion rotating body (Item C of Reaney); the only difference being, Onomoto and Reaney fail to teach a structure wherein the free motion rotating body is supported at a position floating from the floor through the rail and the rotor at a time when the object is initially moved and the free motion rotating body gets into under an inclined face arranged on the downward facing surface of the object so as to lift the front end side of the object at a time after the free motion rotating body contacts the floor during an operation to move the object. Alreck, however, teaches a structure wherein a object (20) with a support (26) is supported at a position floating from the floor through secondary support (48) at a time when the object is initially moved and the support is located underneath an inclined face (i.e., the bottom surface of Item 20 – said bottom surface



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being inclined while in the position shown in Figure 3) arranged on the downward facing surface of the object (20) so as to lift the front end side of the object (20) at a time after the free motion rotating body contacts the floor (see Figure 4) during an operation to move the object. It would have been obvious to one of ordinary skill in the art to incorporate the secondary support taught by Alreck onto the rails in the structure of Onomoto as modified by Reaney in order to keep the drawer level as it rolls over uneven floors, thereby providing the structure substantially as claimed.

68. Claims 10 and 12, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Onomoto (5,046,790) in view of Reaney (5,779,067), Alreck (6,371,584), and Liang (6,457,790). Onomoto, Reaney, and Alreck teach the structure substantially as claimed, including a rail (Item 31 of Onomoto); the only difference being, Onomoto, Reaney, and Alreck fail to teach a stopper arranged at a part of the rail to hold the rotor tentatively at a front end portion of the rail until the free motion rotating body contacts the floor. Liang, however, teaches a stopper (40) arranged at a part of the rail (the combination of Items 10, 20, and 30), said stopper being capable of holding a drawer (D) locked while said drawer is partly extended. It would have been obvious to one of ordinary skill in the art to include the stopper of Liang on the rails of the structure of Onomoto as modified by Reaney and Alreck in order to prevent the drawer from moving prematurely to its maximum extension, thereby providing the structure substantially as claimed.

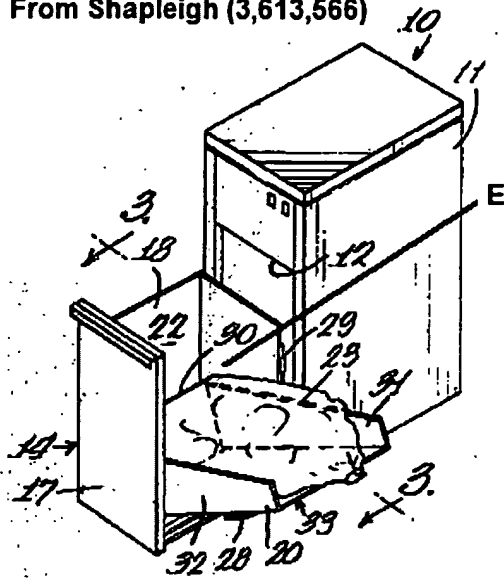
69. Claim 13, as best understood, is rejected under 35 U.S.C. 103(a) as being unpatentable over Onomoto (5,046,790) in view of Reaney (5,779,067). Onomoto and Reaney teach the structure substantially as claimed, including a free-motion rotating body (Item C of Reaney)

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arranged at a position supporting a middle portion along the width of the drawer (see Figure 3 of Reaney); the only difference being, Onomoto and Reaney fail to teach a structure wherein the width of the free motion rotating body exceeds one third of a width of the drawer. However, the examiner takes official notice that the practice of varying the dimensions of free-motion rotating bodies (i.e., wheels) is well known in the art. It would have been an obvious design consideration to one of ordinary skill in the art to modify the free-motion rotating body in the structure of Onomoto and Reaney, by making the width of said free-motion rotating body half the width of the object, depending on the desired needs of the person constructing the free motion rotating body (e.g., intended use of the free motion rotating body, need for structural support, compactness, ease of manufacture, etc.), thereby providing the structure substantially as claimed.

70. Claim 13, as best understood, can be alternately rejected under 35 U.S.C. 103(a) as being unpatentable over Rapp (4,659,237). Rapp teaches the structure substantially as claimed, including a free-motion rotating body (5') and a drawer (1); the only difference being, Rapp fails to teach a structure wherein the width of the free motion rotating body exceeds one third of a width of the drawer. However, the examiner takes official notice that the practice of varying the dimensions of free-motion rotating bodies (i.e., wheels) is well known in the art. It would have been an obvious design consideration to one of ordinary skill in the art to modify the free motion rotating body of the structure of Rapp, by increasing its width to half the width of the drawer, depending on the desired needs of the person constructing the free motion rotating body (e.g., intended use of the free motion rotating body, need for structural support, compactness, ease of manufacture, etc.), thereby providing the structure substantially as claimed.

**Figure 2, Annotated  
From Shapleigh (3,613,566)**



71. Claims 16 and 17, as best understood, can be alternately rejected under 35 U.S.C. 103(a) as being unpatentable over Rapp (4,659,237) in view of Shapleigh (3,613,566). Rapp teaches the structure substantially as claimed, including a drawer (1) arranged at the lowest part of the drawer storage portion (Item C in Figure 1 Annotated); the only difference being, Rapp fails to teach a drawer that has an arrangement in which each upper part of three sides of a bottom wall is surrounded by a standing wall and an upper part of one side thereof that is orthogonal to a direction accessible to an article to be stored is open. Shapleigh, however, teaches a drawer (22) that has an arrangement in which each upper part of three sides of a bottom wall (21) is surrounded by a standing wall (17, 18, 19) and an upper part of one side (Item E in Figure 2 Annotated) thereof that is orthogonal to a direction accessible to an article to be stored is open. It would have been obvious to one of ordinary skill in the art to replace the drawer in the structure of Rapp with the drawer taught by Shapleigh in order to provide easier access to the objects contained within said drawer, thereby providing the structure substantially as claimed.

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***Conclusion***

72. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McAllister (5,680,942) teaches free-motion rotating bodies that contact a floor via an endless track. Saunders (2,739,864), Munday (2002/0043914), and Bessinger (4,615,095) drawers with inclined planes. Redlich (4,318,575), Murphy (827,649), Fales (1,281,932), Bushnell (2,066,608), Newhouse (4,861,122), Brodbeck (2,327,761), Grieser (5,785,400), Gutner (4,305,625), and Harmon (2,950,158) teach drawers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Ing whose telephone number is (571) 272-6536. The examiner can normally be reached on Monday through Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on (571) 272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MWI   
26 July 2006

LANNA MAI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600

